

OIKE

## RAW SEQUENCE LISTING

DATE: 11/14/2001

PATENT APPLICATION: US/09/965,529

TIME: 09:52:53

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

2 <110> APPLICANT: LAL, Preeti  
 3 YUE, Henry  
 4 TANG, Y. Tom  
 5 BANDMAN, Olga  
 6 BURFORD, Neil  
 7 AZIMZAI, Yalda  
 8 BAUGHN, Mariah R.  
 9 LU, Dyung Aina M.  
 10 PATTERSON, Chandra  
 W--> 11 <120> TITLE OF INVENTION: MEMBRANE ASSOCIATED PROTEINS  
 W--> 12 <130> FILE REFERENCE: PF-0731 USA  
 W--> 13 <140> CURRENT APPLICATION NUMBER: To Be Assigned  
 C--> 14 <141> CURRENT FILING DATE: 2001-09-26  
 15 <150> PRIOR APPLICATION NUMBER: 60/149,641  
 16 <151> PRIOR FILING DATE: 1999-08-17  
 17 <150> PRIOR APPLICATION NUMBER: 60/164,203  
 18 <151> PRIOR FILING DATE: 1999-11-09  
 19 <150> PRIOR APPLICATION NUMBER: PCT/US00/22315  
 20 <151> PRIOR FILING DATE: 2000-08-14  
 W--> 21 <160> NUMBER OF SEQ ID: 74  
 22 <170> SOFTWARE: PERL Program  
 W--> 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 351  
 25 <212> TYPE: PRT  
 26 <213> ORGANISM: Homo sapiens  
 W--> 27 <220> FEATURE:  
 28 <221> NAME/KEY: misc\_feature  
 29 <223> OTHER INFORMATION: Incyte ID No: 112301CD1  
 W--> 30 <400> SEQUENCE: 1  
 31 Met Thr Leu Arg Leu Leu Glu Asp Trp Cys Arg Gly Met Asp Met  
 32 1 5 10 15  
 33 Asn Pro Arg Lys Ala Leu Leu Ile Ala Gly Ile Ser Gln Ser Cys  
 34 20 25 30  
 35 Ser Val Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro  
 36 35 40 45  
 37 Leu Gly Glu Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu  
 38 50 55 60  
 39 Asn Arg Lys Val Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His  
 40 65 70 75  
 41 Ala Leu Val Pro Lys Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg  
 42 80 85 90  
 43 Val Ile Phe Lys Pro Pro Asp Pro Asp Asn Thr Phe Leu Ser Arg  
 44 95 100 105  
 45 Leu Asn Glu Phe Leu Ala Gly Glu Gly Met Thr Val Gly Glu Leu  
 46 110 115 120  
 47 Ser Arg Ala Leu Gly His Glu Asn Gly Ser Leu Asp Pro Glu Gln  
 48 125 130 135

ENTERED

p-5

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,529

DATE: 11/14/2001

TIME: 09:52:53

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

```

49 Gly Met Ile Pro Glu Met Trp Ala Pro Met Leu Ala Gln Ala Leu
50                               140                      145                      150
51 Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu Lys Tyr Lys Lys Leu
52                               155                      160                      165
53 Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro Gly Glu Glu Glu
54                               170                      175                      180
55 Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile Lys Ala Trp
56                               185                      190                      195
57 Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu Ser Leu
58                               200                      205                      210
59 Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn Asn
60                               215                      220                      225
61 Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
62                               230                      235                      240
63 Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu
64                               245                      250                      255
65 Thr Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu
66                               260                      265                      270
67 Arg Leu Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile
68                               275                      280                      285
69 Glu Arg Asp Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala
70                               290                      295                      300
71 Gly Ala Val His Lys Thr Ile Arg Arg Glu Leu Asn Leu Pro Glu
72                               305                      310                      315
73 Asp Gly Pro Ala Pro Gly Phe Leu Gln Leu Leu Val Leu Ile Lys
74                               320                      325                      330
75 Asp Tyr Glu Ala Ala Glu Glu Glu Glu Ala Leu Leu Gln Ala Ile
76                               335                      340                      345
77 Leu Glu Gly Asn Phe Thr
78                               350

```

79 &lt;210&gt; SEQ ID NO: 2

80 &lt;211&gt; LENGTH: 458

81 &lt;212&gt; TYPE: PRT

82 &lt;213&gt; ORGANISM: Homo sapiens

W--&gt; 83 &lt;220&gt; FEATURE:

84 &lt;221&gt; NAME/KEY: misc\_feature

85 &lt;223&gt; OTHER INFORMATION: Incyte ID No: 997947CD1

W--&gt; 86 &lt;400&gt; SEQUENCE: 2

```

87 Met Gln Ala Thr Ser Asn Leu Leu Asn Leu Leu Leu Ser Leu
88 1                               5                      10                      15
89 Phe Ala Gly Leu Asp Pro Ser Lys Thr Gln Ile Ser Pro Lys Glu
90                               20                      25                      30
91 Gly Trp Gln Val Tyr Ser Ser Ala Gln Asp Pro Asp Gly Arg Cys
92                               35                      40                      45
93 Ile Cys Thr Val Val Ala Pro Glu Gln Asn Leu Cys Ser Arg Asp
94                               50                      55                      60
95 Ala Lys Ser Arg Gln Leu Arg Gln Leu Leu Glu Lys Val Gln Asn
96                               65                      70                      75
97 Met Ser Gln Ser Ile Glu Val Leu Asn Leu Arg Thr Gln Arg Asp

```

## RAW SEQUENCE LISTING

DATE: 11/14/2001

PATENT APPLICATION: US/09/965,529

TIME: 09:52:53

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

98	80	85	90
99 Phe Gln Tyr Val Leu Lys Met Glu Thr Gln Met Lys Gly Leu Lys			
100	95	100	105
101 Ala Lys Phe Arg Gln Ile Glu Asp Asp Arg Lys Thr Leu Met Thr			
102	110	115	120
103 Lys His Phe Gln Glu Leu Lys Glu Lys Met Asp Glu Leu Leu Pro			
104	125	130	135
105 Leu Ile Pro Val Leu Glu Gln Tyr Lys Thr Asp Ala Lys Leu Ile			
106	140	145	150
107 Thr Gln Phe Lys Glu Glu Ile Arg Asn Leu Ser Ala Val Leu Thr			
108	155	160	165
109 Gly Ile Gln Glu Glu Ile Gly Ala Tyr Asp Tyr Glu Glu Leu His			
110	170	175	180
111 Gln Arg Val Leu Ser Leu Glu Thr Arg Leu Arg Asp Cys Met Lys			
112	185	190	195
113 Lys Leu Thr Cys Gly Lys Leu Met Lys Ile Thr Gly Pro Val Thr			
114	200	205	210
115 Val Lys Thr Ser Gly Thr Arg Phe Gly Ala Trp Met Thr Asp Pro			
116	215	220	225
117 Leu Ala Ser Glu Lys Asn Asn Arg Val Trp Tyr Met Asp Ser Tyr			
118	230	235	240
119 Thr Asn Asn Lys Ile Val Arg Glu Tyr Lys Ser Ile Ala Asp Phe			
120	245	250	255
121 Val Ser Gly Ala Glu Ser Arg Thr Tyr Asn Leu Pro Phe Lys Trp			
122	260	265	270
123 Ala Gly Thr Asn His Val Val Tyr Asn Gly Ser Leu Tyr Phe Asn			
124	275	280	285
125 Lys Tyr Gln Ser Asn Ile Ile Ile Lys Tyr Ser Phe Asp Met Gly			
126	290	295	300
127 Arg Val Leu Ala Gln Arg Ser Leu Glu Tyr Ala Gly Phe His Asn			
128	305	310	315
129 Val Tyr Pro Tyr Thr Trp Gly Gly Phe Ser Asp Ile Asp Leu Met			
130	320	325	330
131 Ala Asp Glu Ile Gly Leu Trp Ala Val Tyr Ala Thr Asn Gln Asn			
132	335	340	345
133 Ala Gly Asn Ile Val Ile Ser Gln Leu Asn Gln Asp Thr Leu Glu			
134	350	355	360
135 Val Met Lys Ser Trp Ser Thr Gly Tyr Pro Lys Arg Ser Ala Gly			
136	365	370	375
137 Glu Ser Phe Met Ile Cys Gly Thr Leu Tyr Val Thr Asn Ser His			
138	380	385	390
139 Leu Thr Gly Ala Lys Val Tyr Tyr Ser Tyr Ser Thr Lys Thr Ser			
140	395	400	405
141 Thr Tyr Glu Tyr Thr Asp Ile Pro Phe His Asn Gln Tyr Phe His			
142	410	415	420
143 Ile Ser Met Leu Asp Tyr Asn Ala Arg Asp Arg Ala Leu Tyr Ala			
144	425	430	435
145 Trp Asn Asn Gly His Gln Val Leu Phe Asn Val Thr Leu Phe His			
146	440	445	450

## RAW SEQUENCE LISTING

DATE: 11/14/2001

PATENT APPLICATION: US/09/965,529

TIME: 09:52:53

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

```

147 Ile Ile Lys Thr Glu Asp Asp Thr
148                               455
149 <210> SEQ ID NO: 3
150 <211> LENGTH: 219
151 <212> TYPE: PRT
152 <213> ORGANISM: Homo sapiens
W--> 153 <220> FEATURE:
154 <221> NAME/KEY: misc_feature
155 <223> OTHER INFORMATION: Incyte ID No: 1521513CD1
W--> 156 <400> SEQUENCE: 3
157 Met Asn Ser Ser Lys Ser Ser Glu Thr Gln Cys Thr Glu Arg Gly
158   1                               5               10           15
159 Cys Phe Ser Ser Gln Met Phe Leu Trp Thr Val Ala Gly Ile Pro
160                               20               25           30
161 Ile Leu Phe Leu Ser Ala Cys Phe Ile Thr Arg Cys Val Val Thr
162                               35               40           45
163 Phe Arg Ile Phe Gln Thr Cys Asp Glu Lys Lys Phe Gln Leu Pro
164                               50               55           60
165 Glu Asn Phe Thr Glu Leu Ser Cys Tyr Asn Tyr Gly Ser Gly Ser
166                               65               70           75
167 Val Lys Asn Cys Cys Pro Leu Asn Trp Glu Tyr Phe Gln Ser Ser
168                               80               85           90
169 Cys Tyr Phe Phe Ser Thr Asp Thr Ile Ser Trp Ala Leu Ser Leu
170                               95              100          105
171 Lys Asn Cys Ser Ala Met Gly Ala His Leu Val Val Ile Asn Ser
172                               110             115          120
173 Gln Glu Glu Gln Glu Phe Leu Ser Tyr Lys Lys Pro Lys Met Arg
174                               125             130          135
175 Glu Phe Phe Ile Gly Leu Ser Asp Gln Val Val Glu Gly Gln Trp
176                               140             145          150
177 Gln Trp Val Asp Gly Thr Pro Leu Thr Lys Ser Leu Ser Phe Trp
178                               155             160          165
179 Asp Val Gly Glu Pro Asn Asn Ile Ala Thr Leu Glu Asp Cys Ala
180                               170             175          180
181 Thr Met Arg Asp Ser Ser Asn Pro Arg Gln Asn Trp Asn Asp Val
182                               185             190          195
183 Thr Cys Phe Leu Asn Tyr Phe Arg Ile Cys Glu Met Val Gly Ile
184                               200             205          210
185 Asn Pro Leu Asn Lys Gly Lys Ser Leu
186                               215
187 <210> SEQ ID NO: 4
188 <211> LENGTH: 276
189 <212> TYPE: PRT
190 <213> ORGANISM: Homo sapiens
W--> 191 <220> FEATURE:
192 <221> NAME/KEY: misc_feature
193 <223> OTHER INFORMATION: Incyte ID No: 1863994CD1
W--> 194 <400> SEQUENCE: 4
195 Met Glu Ser Arg Met Trp Pro Ala Leu Leu Leu Ser His Leu Leu

```

## RAW SEQUENCE LISTING

DATE: 11/14/2001

PATENT APPLICATION: US/09/965,529

TIME: 09:52:53

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

```

196      1              5              10              15
197 Pro Leu Trp Pro Leu Leu Leu Leu Pro Leu Pro Pro Pro Ala Gln
198                      20              25              30
199 Gly Ser Ser Ser Ser Pro Arg Thr Pro Pro Ala Pro Ala Arg Pro
200                      35              40              45
201 Pro Cys Ala Arg Gly Gly Pro Ser Ala Pro Arg His Val Cys Val
202                      50              55              60
203 Trp Glu Arg Ala Pro Pro Pro Ser Arg Ser Pro Arg Val Pro Arg
204                      65              70              75
205 Ser Arg Arg Gln Val Leu Pro Gly Thr Ala Pro Pro Ala Thr Pro
206                      80              85              90
207 Ser Gly Phe Glu Glu Gly Pro Pro Ser Ser Gln Tyr Pro Trp Ala
208                      95              100             105
209 Ile Val Trp Gly Pro Thr Val Ser Arg Glu Asp Gly Gly Asp Pro
210                     110             115             120
211 Asn Ser Ala Asn Pro Gly Phe Leu Asp Tyr Gly Phe Ala Ala Pro
212                     125             130             135
213 His Gly Leu Ala Thr Pro His Pro Asn Ser Asp Ser Met Arg Gly
214                     140             145             150
215 Asp Gly Asp Gly Leu Ile Leu Gly Glu Ala Pro Ala Thr Leu Arg
216                     155             160             165
217 Pro Phe Leu Phe Gly Gly Arg Gly Glu Gly Val Asp Pro Gln Leu
218                     170             175             180
219 Tyr Val Thr Ile Thr Ile Ser Ile Ile Ile Val Leu Val Ala Thr
220                     185             190             195
221 Gly Ile Ile Phe Lys Phe Cys Trp Asp Arg Ser Gln Lys Arg Arg
222                     200             205             210
223 Arg Pro Ser Gly Gln Gln Gly Ala Leu Arg Gln Glu Glu Ser Gln
224                     215             220             225
225 Gln Pro Leu Thr Asp Leu Ser Pro Ala Gly Val Thr Val Leu Gly
226                     230             235             240
227 Ala Phe Gly Asp Ser Pro Thr Pro Thr Pro Asp His Glu Glu Pro
228                     245             250             255
229 Arg Gly Gly Pro Arg Pro Gly Met Pro His Pro Lys Gly Ala Pro
230                     260             265             270
231 Ala Phe Gln Leu Asn Arg
232                     275
233 <210> SEQ ID NO: 5
234 <211> LENGTH: 375
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
W--> 237 <220> FEATURE:
238 <221> NAME/KEY: misc_feature
239 <223> OTHER INFORMATION: Incyte ID No: 2071941CD1
W--> 240 <400> SEQUENCE: 5
241 Met Ser Ser His Lys Gly Ser Val Val Ala Gln Gly Asn Gly Ala
242      1              5              10              15
243 Pro Ala Ser Asn Arg Glu Ala Asp Thr Val Glu Leu Ala Glu Leu
244                     20              25              30

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,529

DATE: 11/14/2001

TIME: 09:52:54

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

L:11 M:283 W: Missing Blank Line separator, <120> field identifier  
L:12 M:283 W: Missing Blank Line separator, <130> field identifier  
L:13 M:283 W: Missing Blank Line separator, <140> field identifier  
L:13 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:21 M:283 W: Missing Blank Line separator, <160> field identifier  
L:23 M:283 W: Missing Blank Line separator, <210> field identifier  
L:27 M:283 W: Missing Blank Line separator, <220> field identifier  
L:30 M:283 W: Missing Blank Line separator, <400> field identifier  
L:83 M:283 W: Missing Blank Line separator, <220> field identifier  
L:86 M:283 W: Missing Blank Line separator, <400> field identifier  
L:153 M:283 W: Missing Blank Line separator, <220> field identifier  
L:156 M:283 W: Missing Blank Line separator, <400> field identifier  
L:191 M:283 W: Missing Blank Line separator, <220> field identifier  
L:194 M:283 W: Missing Blank Line separator, <400> field identifier  
L:237 M:283 W: Missing Blank Line separator, <220> field identifier  
L:240 M:283 W: Missing Blank Line separator, <400> field identifier  
L:295 M:283 W: Missing Blank Line separator, <220> field identifier  
L:298 M:283 W: Missing Blank Line separator, <400> field identifier  
L:337 M:283 W: Missing Blank Line separator, <220> field identifier  
L:340 M:283 W: Missing Blank Line separator, <400> field identifier  
L:393 M:283 W: Missing Blank Line separator, <220> field identifier  
L:396 M:283 W: Missing Blank Line separator, <400> field identifier  
L:427 M:283 W: Missing Blank Line separator, <220> field identifier  
L:430 M:283 W: Missing Blank Line separator, <400> field identifier  
L:479 M:283 W: Missing Blank Line separator, <220> field identifier  
L:482 M:283 W: Missing Blank Line separator, <400> field identifier  
L:533 M:283 W: Missing Blank Line separator, <220> field identifier  
L:536 M:283 W: Missing Blank Line separator, <400> field identifier  
L:625 M:283 W: Missing Blank Line separator, <220> field identifier  
L:628 M:283 W: Missing Blank Line separator, <400> field identifier  
L:699 M:283 W: Missing Blank Line separator, <220> field identifier  
L:702 M:283 W: Missing Blank Line separator, <400> field identifier  
L:785 M:283 W: Missing Blank Line separator, <220> field identifier  
L:788 M:283 W: Missing Blank Line separator, <400> field identifier  
L:855 M:283 W: Missing Blank Line separator, <220> field identifier  
L:858 M:283 W: Missing Blank Line separator, <400> field identifier  
L:901 M:283 W: Missing Blank Line separator, <220> field identifier  
L:904 M:283 W: Missing Blank Line separator, <400> field identifier  
L:997 M:283 W: Missing Blank Line separator, <220> field identifier  
L:1000 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1061 M:283 W: Missing Blank Line separator, <220> field identifier  
L:1064 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1109 M:283 W: Missing Blank Line separator, <220> field identifier  
L:1112 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1169 M:283 W: Missing Blank Line separator, <220> field identifier  
L:1172 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1235 M:283 W: Missing Blank Line separator, <220> field identifier

## VERIFICATION SUMMARY

DATE: 11/14/2001

PATENT APPLICATION: US/09/965,529

TIME: 09:52:54

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

L:1238 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1305 M:283 W: Missing Blank Line separator, <220> field identifier  
L:1308 M:283 W: Missing Blank Line separator, <400> field identifier  
L:1345 M:283 W: Missing Blank Line separator, <220> field identifier  
L:2268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39  
L:2269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39  
L:2270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39  
L:3086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62

**STATISTICS SUMMARY**

PATENT APPLICATION: US/09/965,529

DATE: 11/14/2001

TIME: 09:52:54

Input Set : A:\PTO.MBH.txt

Output Set: N:\CRF3\11142001\I965529.raw

Application Serial Number: US/09/965,529

Alpha or Numeric: Numeric

Application Class:

Application File Date: 09-26-2001

Art Unit: OIPE

Software Application: Other

Total Number of Sequences: 74

Total Nucleotides: 64095

Total Amino Acids: 13483

Number of Errors: 0

Number of Warnings: 159

Number of Corrections: 2

**MESSAGE SUMMARY**

270 C: 1 (Current Application Number differs)

271 C: 1 (Current Filing Date differs)

283 W: 155 (Missing Blank Line separator)

341 W: 4 ((46) "n" or "Xaa" used)